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<110> The Scripps Research Institute
<120> INTEGRIN ALPHA.IIb.BETA.3 SPECIFIC ANTIBODIES AND PEPTIDES
<130> TSRI 1019.1 US
<140> US 10/581,431
<141> 2004-12-03
<150> US 60/526,859
<151> 2003-12-03
<150> PCT/US2004/040381
<151> 2004-12-03
<160> 72
<210> 1
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<220>
<223> HCDR3 part
<400> 1
Cys Ser Phe Gly Arg Gly Asp Ile Arg Asn Cys
<210> 2
<211> 11
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<213> Artificial Sequence
<220>
<223> HCDR3 part
<400> 2
Gly Ser Phe Gly Arg Gly Asp Ile Arg Asn Gly
                  5
<210> 3
<211> 16
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic Construct
<220>
<221> VARIANT
<222> (3,4,5,9,10,11)
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<223> encoded by randomized DNA sequence: Ala, Cys, Asp, Glu,

```
Phe, Gly, His, Ile, Lys, Leu, Met, Asn, Pro, Gln, Arg, Ser,
Thr, Val, Trp, Tyr
<400> 3
Val Gly Xaa Xaa Xaa Arg Ala Asp Xaa Xaa Xaa Tyr Ala Met Asp
Val
<210> 4
<211> 9
<212> PRT
<213> Artificial Sequence
<220>
<223> HCDR3 consensus part
<400> 4
Val Val Cys Arg Ala Asp Lys Arg Cys
<210> 5
<211> 9
<212> PRT
<213> Artificial Sequence
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<223> HCDR3 consensus part
<400> 5
Val Trp Cys Arg Ala Asp Arg Arg Cys
<210> 6
<211> 9
<212> PRT
<213> Artificial Sequence
<223> HCDR3 consensus part
<400> 6
Val Trp Cys Arg Ala Asp Lys Arg Cys
 1
<210> 7
<211> 9
<212> PRT
<213> Artificial Sequence
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<220>
<223> HCDR3 consensus part
<400> 7
Val Val Cys Arg Ala Asp Arg Arg Cys
<210> 8
<211> 16
<212> PRT
<213> Artificial Sequence
<220>
<223> CDR consensus part
<400> 8
Val Arg Val Val Cys Arg Ala Asp Arg Arg Cys Tyr Ala Met Asp
                  5
 1
                                      10
Val
<210> 9
<211> 72
<212> DNA
<213> Artificial Sequence
<220>
<221> misc feature
<222> (25, 26, 28, 29, 31, 32, 43, 44, 46, 47, 49, 50)
<223> primer neo-rad-f; encoded by randomized DNA sequence: a, g, c, t
<220>
<221> misc feature
<222> (27,30,33,45,48,51)
<223> primer neo-rad-f; encoded by randomized DNA sequence: g, t
<400> 9
gtgtattact gtgcgagagt ggggnnknnk nnkcgtgccg acnnknnknn ktacgctatg
                                                                          60
                                                                         72
gacgtctggg gc
<210> 10
<211> 21
<212> DNA
<213> Artificial Sequence
<220>
<223> primer dpseq
<400> 10
                                                                         21
agaagcgtag tccggaacgt c
```

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<210> 11
<211> 57
<212> DNA
<213> Artificial Sequence
<220>
<223> primer DP-47N-term
<400> 11
                                                                         57
qctqcccaac cagccatggc cgaggtgcag ctgttggagt ctgggggagg cttggta
<210> 12
<211> 39
<212> DNA
<213> Artificial Sequence
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<223> primer DP-47FR3
<400> 12
                                                                         39
cactetegea cagtaataca eggeegtgte eteggetet
<210> 13
 <211> 21
 <212> DNA
<213> Artificial Sequence
><220>
 <223> primer lead-VH
<400> 13
                                                                         21
 ggccatggct ggttgggcag c
 <210> 14
 <211> 39
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> primer dp-EX
 <400> 14
                                                                         39
 gaggaggagg aggaggagag aagcgtagtc cggaacgtc
 <210> 15
 <211> 24
 <212> DNA
 <213> Artificial Sequence
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<220>
<223> primer ompseq
<400> 15
                                                                         24
aagacagcta tcgcgattgc agtg
<210> 16
<211> 21
<212> DNA
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<220>
<223> primer leadB
<400> 16
                                                                         21
ggccatggct ggttgggcag c
<210> 17
<211> 41
<212> DNA
<213> Artificial Sequence
<220>
<223> primer RSC-F
<400> 17
                                                                         41
gaggaggagg aggaggaggc ggggcccagg cggccgagct c
<210> 18
<211> 21
<212> DNA
<213> Artificial Sequence
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<223> primer lead-B
<400> 18
                                                                         21
ggccatggct ggttgggcag c
<210> 19
<211> 9
<212> PRT
<213> Homo sapiens
400> 19
Thr His Ser Arg Ala Asp Arg Arg Glu
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<210> 20

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<211> 9
<212> PRT
<213> Artificial Sequence
<220>
<223> inversed RAD motif peptide
<400> 20
Val Val Cys Asp Ala Arg Arg Cys
<210> 21
<211> 9
<212> PRT
<213> Artificial Sequence
<220>
<223> inversed RAD motif peptide
<400> 21
Thr His Ser Asp Ala Arg Arg Arg Glu
<210> 22
<211> 9
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic Construct
<220>
<221> VARIANT
<222> (1,2,3,7,8,9)
<223> encoded by randomized DNA sequence: Ala, Cys, Asp, Glu,
Phe, Gly, His, Ile, Lys, Leu, Met, Asn, Pro, Gln, Arg, Ser,
Thr, Val, Trp, Tyr
<400> 22
Xaa Xaa Xaa Arg Ala Asp Xaa Xaa
<210> 23
<211> 8
<212> PRT
<213> Artificial Sequence
<223> RAD motif peptide
<400> 23
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Cys Arg Ala Asp Val Pro Leu Cys
<210> 24
<211> 9
<212> PRT
<213> Artificial Sequence
<220>
<223> RAD motif peptide
<400> 24
Cys Met Ser Arg Ala Asp Arg Pro Cys
<210> 25
<211> 16
<212> PRT
<213> Artificial Sequence
<220>
<223> CDR consensus part
<400> 25
Val Arg Val Val Cys Arg Ala Asp Lys Arg Cys Tyr Ala Met Asp
                  5
 1
                                      10
Val
<210> 26
<211> 16
<212> PRT
<213> Artificial Sequence
<220>
<223> CDR consensus part
<400> 26
Val Arg Val Trp Cys Arg Ala Asp Arg Arg Cys Tyr Ala Met Asp
1
                  5
                                     10
Val
<210> 27
<211> 16
<212> PRT
<213> Artificial Sequence
<220>
<223> CDR consensus part
<400> 27
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Val Arg Val Trp Cys Arg Ala Asp Lys Arg Cys Tyr Ala Met Asp
                                     10
Val
<210> 28
<211> 16
<212> PRT
<213> Artificial Sequence
<220>
<223> CDR consensus part
<400> 28
Val Gly Val Val Cys Arg Ala Asp Arg Arg Cys Tyr Ala Met Asp
                                      10
Val
<210> 29
<211> 16
<212> PRT
<213> Artificial Sequence
<220>
<223> CDR consensus part
<400> 29
Val Gly Val Val Cys Arg Ala Asp Lys Arg Cys Tyr Ala Met Asp
 1
                                      10
Val
<210> 30
<211> 16
<212> PRT
<213> Artificial Sequence
<223> CDR consensus part
<400> 30
Val Gly Val Trp Cys Arg Ala Asp Arg Arg Cys Tyr Ala Met Asp
                                      10
Val
<210> 31
<211> 16
<212> PRT
<213> Artificial Sequence
<220>
<223> CDR consensus part
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<400> 31
Val Gly Val Trp Cys Arg Ala Asp Lys Arg Cys Tyr Ala Met Asp
                                     10
Val
<210> 32
<211> 118
<212> PRT
<213> Homo sapiens
<220>
<223> RAD87 part
<400> 32
Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
Gly Ser Leu Arg Leu Ser Cys Ala Gly Ser Gly Phe Thr Phe Ser
Ser Tyr Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
                 35
                                     40
Glu Trp Val Ser Ala Ile Gly Thr Gly Gly Gly Thr Tyr Tyr Ala
                 50
Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys
                 65
                                     70
Asn Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
                 80
                                      85
Ala Val Tyr Tyr Cys Ala Arg Val Arg Val Val Cys Arg Ala Asp
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Arg Arg Cys Tyr Ala Met Asp Val Trp Gly Gln Gly Thr

110

100

<210> 33 <211> 118 <212> PRT <213> Homo sapiens

<220>

<223> RAD9 part

<400> 33

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Ala Val Tyr Tyr Cys Ala Arg Val Arg Val Val Cys Arg Ala Asp
                 95
                                    100
Arg Arg Cys Tyr Ala Met Asp Val Trp Gly Gln Gly Thr
                110
                                    115
<210> 34
<211> 118
<212> PRT
<213> Homo sapiens
<220>
<223> RAD12 part
<400> 34
Glu Val Gln Leu Leu Glu Ser Gly Gly Leu Val Gln Pro Gly
Gly Ser Leu Arg Leu Ser Cys Ala Gly Ser Gly Phe Thr Phe Ser
                 20
Ser Tyr Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
Glu Trp Val Ser Ala Ile Gly Thr Gly Gly Gly Thr Tyr Ala
                 50
                                     55
Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys
                 65
Asn Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
                                     85
Ala Val Tyr Tyr Cys Ala Arg Val Arg Val Val Cys Arg Ala Asp
                 95
                                    100
Arg Arg Cys Tyr Ala Met Asp Val Trp Gly Gln Gly Thr
                110
                                    115
<210> 35
<211> 118
<212> PRT
<213> Homo sapiens
<220>
<223> RAD34 part
<400> 35
Glu Val Gln Leu Leu Glu Ser Gly Gly Leu Val Gln Pro Gly
Gly Ser Leu Arg Leu Ser Cys Ala Gly Ser Gly Phe Thr Phe Ser
                 20
                                     25
Ser Tyr Ala Met His Trp Val Arg Gln Ala Pro. Gly Lys Gly Leu
                                     40
                 35
Glu Trp Val Ser Ala Ile Gly Thr Gly Gly Gly Thr Tyr Ala
Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys
Asn Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
                                     85
Ala Val Tyr Tyr Cys Ala Arg Val Arg Val Val Cys Arg Ala Asp
```

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95
                                    100
                                                        105
Arg Arg Cys Tyr Ala Met Asp Val Trp Gly Gln Gly Thr
                110
<210> 36
<211> 118
<212> PRT
<213> Homo sapiens
<220>
<223> RAD3 part
<400> 36
Glu Val Gln Leu Leu Glu Ser Gly Gly Leu Val Gln Pro Gly
Gly Ser Leu Arg Leu Ser Cys Ala Gly Ser Gly Phe Thr Phe Ser
                20
Ser Tyr Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
                35
Glu Trp Val Ser Ala Ile Gly Thr Gly Gly Gly Thr Tyr Ala
                 50
                                     55
Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys
                 65
Asn Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
                 80
                                     85
Ala Val Tyr Tyr Cys Ala Arg Val Arg Val Cys Arg Ala Asp
                 95
                                    100
Arg Arg Cys Tyr Ala Met Asp Val Trp Gly Gln Gly Thr
                110
                                    115
<210> 37
<211> 118
<212> PRT
<213> Homo sapiens
<220>
<223> RAD32 part
<400> 37
Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val His Pro Gly
Gly Ser Leu Arg Leu Ser Cys Ala Gly Ser Gly Phe Thr Phe Ser
                 20
                                     25
Ser Tyr Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
                 35
                                     40
Glu Trp Val Ser Ala Ile Gly Thr Gly Gly Gly Thr Tyr Ala
Asp Ser Val Lys Gly Arg Phe Thr Val Ser Arg Asp Asn Ser Gln
Ser Thr Ala Tyr Leu Gln Ile Asn Ser Leu Arg Ala Glu Asp Thr
                 80
                                     85
Ala Val Tyr Tyr Cys Ala Arg Val Gly Val Trp Cys Arg Ala Asp
                                    100
                                                         105
```

Lys Arg Cys Tyr Ala Met Asp Val Trp Gly Gln Gly Thr 110 <210> 38 <211> 118 <212> PRT <213> Homo sapiens <220> <223> RAD88 part <400> 38 Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val His Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Gly Ser Gly Phe Thr Phe Ser Ser Tyr Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu 35 Glu Trp Val Ser Ala Ile Gly Thr Gly Gly Gly Thr Tyr Ala 50 55 Asp Ser Val Lys Gly Arg Phe Thr Val Ser Arg Asp Asn Ser Gln 65 70 Ser Thr Ala Tyr Leu Gln Ile Asn Ser Leu Arg Ala Glu Asp Thr 80 85. Ala Val Tyr Tyr Cys Ala Arg Val Gly Val Trp Cys Arg Ala Asp 95 Lys Arg Cys Tyr Ala Met Asp Val Trp Gly Gln Gly Thr 110 <210> 39 <211> 119 <212> PRT <213> Homo sapiens <220> <223> RAD1 part <400> 39 Glu Val Gln Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser 20 Phe Tyr Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu 35 40 Glu Trp Val Ser Gly Val Ser Ser Ser Gly Ile Thr Thr Tyr Tyr 55 50 Ala Ala Ser Val Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp

Thr Ala Val Tyr Tyr Cys Ala Arg Val Arg Thr His Ser Arg Ala

Asp Arg Arg Glu Tyr Ala Met Asp Val Trp Gly Gln Gly Thr

100

110 115

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<210> 40
<211> 3
<212> PRT
<213> Homo sapiens
<220>
<223> RGD motif
<400> 40
Arg Gly Asp
<210> 41
<211> 3
<212> PRT
<213> Artificial Sequence
<220>
<223> RAD motif
<400> 41
Arg Ala Asp
<210> 42
<211> 3
<212> PRT
<213> Mus musculus
<220>
<223> RYD motif
<400> 42
Arg Tyr Asp
<210> 43
<211> 9
<212> PRT
<213> Homo sapiens
<220>
<223> RAD1 part
<400> 43
Thr His Ser Arg Ala Asp Arg Arg Glu
```

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<210> 44
<211> 9
<212> PRT
<213> Homo sapiens
<220>
<223> RAD3 part
<400> 44
Val Val Cys Arg Ala Asp Arg Arg Cys
<210> 45
<211> 9
<212> PRT
<213> Homo sapiens
<220>
<223> RAD4 part
<400> 45
Val Trp Cys Arg Ala Asp Arg Arg Cys
<210> 46
<211> 9
<212> PRT
<213> Homo sapiens
<220>
<223> RAD9 part
<400> 46
Val Val Cys Arg Ala Asp Arg Arg Cys
<210> 47
<211> 9
<212> PRT
<213> Homo sapiens
<220>
<223> RAD11 part
<400> 47
Val Trp Cys Arg Ala Asp Arg Arg Cys
                  5
```

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<210> 48
<211> 9
<212> PRT
<213> Homo sapiens
<220>
<223> RAD12 part
<400> 48
Val Val Cys Arg Ala Asp Arg Arg Cys
<210> 49
<211> 9
<212> PRT
<213> Homo sapiens
<220>
<223> RAD32 part
<400> 49
Val Trp Cys Arg Ala Asp Lys Arg Cys
<210> 50
<211> 9
<212> PRT
<213> Homo sapiens
<220>
<223> RAD34 part
<400> 50
Val Val Cys Arg Ala Asp Arg Arg Cys
 1
<210> 51
<211> 9
<212> PRT
<213> Homo sapiens
<220>
<223> RAD87 part
<400> 51
Val Val Cys Arg Ala Asp Arg Cys
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<210> 52
 <211> 9
<212> PRT
 <213> Homo sapiens
 <220>
 <223> RAD88 part
 <400> 52
 Val Trp Cys Arg Ala Asp Lys Arg Cys
 <210> 53
 <211> 18
 <212> PRT
 <213> Homo sapiens
 <220>
 <223> Anti-gp120 Fab part
 <400> 53
 Val Gly Pro Tyr Ser Trp Asp Asp Ser Pro Asp Gln Asn Tyr Tyr
 Met Asp Val
 <210> 54
 <211> 18
 <212> PRT
 <213> Homo sapiens
 <220>
 <223> Synthetic Construct
 <220>
 <221> VARIANT
 <222> (4,5,6,10,11,12)
 <223> Fab library part; Ala, Cys, Asp, Glu, Phe, Gly, His, Ile,
 Lys, Leu, Met, Asn, Pro, Gln, Arg, Ser, Thr, Val, Trp, Tyr
 <400> 54
 Val Gly Cys Xaa Xaa Xaa Arg Gly Asp Xaa Xaa Xaa Cys Tyr Tyr
 Met Asp Val
 <210> 55
 <211> 18
 <212> PRT
 <213> Homo sapiens
 <220>
 <223> Fab-4 part
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<400> 55
Val Gly Cys Thr Gly Gln Arg Gly Asp Trp Arg Ser Cys Tyr Tyr
                                      10
Met Asp Val
<210> 56
<211> 18
<212> PRT
<213> Homo sapiens
<220>
<223> Fab-7 part
<400> 56
Val Gly Cys Thr Tyr Gly Arg Gly Asp Thr Arg Asn Cys Tyr Tyr
Met Asp Val
<210> 57
<211> 18
<212> PRT
<213> Homo sapiens
<220>
<223> Fab-8 part
<400> 57
Val Gly Cys Pro Ile Pro Arg Gly Asp Trp Arg Glu Cys Tyr Tyr
                  5
Met Asp Val
<210> 58
<211> 18
<212> PRT
<213> Homo sapiens
<220>
<223> Fab-9 part
<400> 58
Val Gly Cys Ser Phe Gly Arg Gly Asp Ile Arg Asn Cys Tyr Tyr
 1
Met Asp Val
<210> 59
<211> 18
<212> PRT
<213> Homo sapiens
```

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<220>
<223> Fab-10 part
<400> 59
Val Gly Cys Thr Trp Gly Arg Gly Asp Glu Arg Asn Cys Tyr Tyr
Met Asp Val
<210> 60
<211> 18
<212> PRT
<213> Homo sapiens
<220>
<223> Synthetic Construct
<220>
<221> VARIANT
<222> (7,8,9,10)
<223> MTF library part; Ala, Cys, Asp, Glu, Phe, Gly, His,
Ile, Lys, Leu, Met, Asn, Pro, Gln, Arg, Ser, Thr, Val, Trp, Tyr
<400> 60
Val Gly Cys Ser Phe Gly Xaa Xaa Xaa Arg Asn Cys Tyr Tyr
                                      10
Met Asp Val
<210> 61
<211> 18
<212> PRT
<213> Homo sapiens
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<223> MTF-2 part
<400> 61
Val Gly Cys Ser Phe Gly Arg Thr Asp Gln Arg Ile Cys Tyr Tyr
                  5
                                      10
Met Asp Val
<210> 62
<211> 18
<212> PRT
<213> Homo sapiens
<220>
<223> MTF-10 part
<400> 62
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Val Gly Cys Ser Phe Gly Lys Gly Asp Asn Arg Ile Cys Tyr Tyr
Met Asp Val
<210> 63
<211> 18
<212> PRT
<213> Homo sapiens
<220>
<223> MTF-32 part
<400> 63
Val Gly Cys Ser Phe Gly Arg Arg Asn Glu Arg Asn Cys Tyr Tyr
                  5
                                      10
                                                           15
 1
Met Asp Val
<210> 64
<211> 18
<212> PRT
<213> Homo sapiens
<220>
<223> MTF-40 part
<400> 64
Val Gly Cys Ser Phe Gly Arg Asn Asp Ser Arg Asn Cys Tyr Tyr
                  5
                                                           15
Met Asp Val
<210> 65
<211> 18
<212> PRT
<213> Homo sapiens
<220>
<223> MTF-1 part
<400> 65
Val Gly Cys Ser Phe Gly Arg Val Asp Asp Arg Asn Cys Tyr Tyr
                                      10
Met Asp Val
<210> 66
<211> 18
<212> PRT
<213> Homo sapiens
<220>
<223> MTF-12 part
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<400> 66
Val Gly Cys Ser Phe Gly Arg Ala Asp Arg Arg Asn Cys Tyr Tyr
                                      10
Met Asp Val
<210> 67
<211> 18
<212> PRT
<213> Homo sapiens
<220>
<223> MTF-15 part
<400> 67
Val Gly Cys Ser Phe Gly Arg Ser Val Asp Arg Asn Cys Tyr Tyr
Met Asp Val
<210> 68
<211> 18
<212> PRT
<213> Homo sapiens
<220>
<223> MTF-7 part
<400> 68
Val Gly Cys Ser Phe Gly Lys Arg Asp Met Arg Asn Cys Tyr Tyr
Met Asp Val
<210> 69
<211> 18
<212> PRT
<213> Homo sapiens
<220>
<223> MTF-13 part
<400> 69
Val Gly Cys Ser Phe Gly Arg Trp Asp Ala Arg Asn Cys Tyr Tyr
 1
                  5
Met Asp Val
<210> 70
<211> 18
<212> PRT
<213> Homo sapiens
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<220>
<223> MTF-14 part
<400> 70
Val Gly Cys Ser Phe Gly Arg Gln Asp Val Arg Asn Cys Tyr Tyr
                                     10
Met Asp Val
<210> 71
<211> 18
<212> PRT
<213> Homo sapiens
<220>
<223> MTF-20 part
<400> 71
Val Gly Cys Ser Phe Gly Arg Asp Gly Arg Asn Cys Tyr Tyr
                  5
                                     10
Met Asp Val
<210> 72
<211> 16
<212> PRT
<213> Homo sapiens
<220>
<223> Synthetic Construct
<220>
<221> VARIANT
<222> (3,4,5,9,10,11)
<223> RAD library part; Ala, Cys, Asp, Glu, Phe, Gly, His, Ile,
Lys, Leu, Met, Asn, Pro, Gln, Arg, Ser, Thr, Val, Trp, Tyr
<400> 72
Val Arg Xaa Xaa Xaa Arg Ala Asp Xaa Xaa Xaa Tyr Ala Met Asp
 1
                  5
                                      10
Val
```